

CLAIM AMENDMENTS

Claims pending:

- At time of the Office Action: Claims 1-33.
- After this Response: Claims 1-33.

Cancelled claims: none.

Amended claims: 1 and 29.

New Claims: none.

Please amend claims 1 and 29 as follows:

1. (CURRENTLY AMENDED) A method of synchronizing data among a plurality of web servers, wherein each of the plurality of web servers is coupled to a common data server, the method comprising:

retrieving a scheduled activation time from the data server;

prior to the scheduled activation time, retrieving updated data into staging caches in the plurality of web servers; and

at the scheduled activation time, copying the updated data from the staging caches within each of the plurality of web servers to an active cache within each of the plurality of web servers, respectively.

2. (ORIGINAL) A method as recited in claim 1 further comprising

comparing a time associated with a clock in each web server to a time associated with a clock in the data server; and

adjusting the scheduled activation time on each web server by the time difference between the clock in the web server and the clock in the data server.

3. (ORIGINAL) A method as recited in claim 1 wherein each web server contains a clock, and wherein the clocks in the plurality of web servers are not synchronized with one another.

4. (ORIGINAL) A method as recited in claim 1 wherein the copying data comprises swapping an active data cache pointer with a staged data cache pointer.

5. (ORIGINAL) A method as recited in claim 1 wherein no communications are required between the individual web servers to synchronize their data.

6. (ORIGINAL) A method as recited in claim 1 wherein retrieving updated data into staging caches in the plurality of web servers is performed asynchronously.

7. (ORIGINAL) A method as recited in claim 1 further comprising:
after the scheduled activation time, updating data caches in the data server.

8. (ORIGINAL) A method as recited in claim 1 further comprising:
after the scheduled activation time, calculating a next scheduled activation
time.

9. (ORIGINAL) A method as recited in claim 1 further comprising:
after the scheduled activation time, updating data caches in the data server
calculating a next scheduled activation time, wherein the updating and
calculating are performed by the first web server to initiate a retrieval process after
the scheduled activation time.

10. (ORIGINAL) A method as recited in claim 1 further comprising:
if an additional web server is coupled to the data server, then copying data
an active cache in the data server to an active cache in the additional web

11. (ORIGINAL) A method as recited in claim 1 further comprising:
if one of the plurality of web servers is initialized, then copying data from
active cache in the data server to the active cache in the initialized web server.

12. (ORIGINAL) A method as recited in claim 1 wherein the plurality of web servers comprise a web farm.

13. (ORIGINAL) A method as recited in claim 1 wherein the plurality of web servers comprise a web farm, and wherein the plurality of web servers are load balanced using a domain name service (DNS) round-robin technique.

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2 14. (ORIGINAL) One or more computer-readable memories containing
3 a computer program that is executable by a processor to perform the method
4 recited in claim 1.

5
6 15. (ORIGINAL) A system comprising:
7 a plurality of web servers coupled to a common data server, wherein each
8 of the plurality of web servers comprises:
9 a staging cache;
10 an active data cache coupled to the staging cache;
11 wherein the web server is configured to retrieve a scheduled
12 activation time from the data server, and further configured to retrieve
13 updated data from the data server into the staging cache prior to the
14 scheduled activation time; and
15 wherein the web server is configured to copy data from the staging cache to
16 the active data cache at the scheduled activation time.

17
18 16. (ORIGINAL) A system as recited in claim 15 wherein each web
19 server contains a clock having an associated time, and wherein each web server is
20 configured to compare the time associated with the clock in the web server to a
21 time associated with a clock in the data server.

1 17. (ORIGINAL) A system as recited in claim 16 wherein each web
2 server is further configured to adjust the scheduled activation time on the web
3 server by the time difference between the clock in the web server and the clock in
4 the data server.

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6 18. (ORIGINAL) A system as recited in claim 15 wherein each web
7 server contains a clock, and wherein the clocks in the plurality of web servers are
8 not synchronized with one another.

9
10 19. (ORIGINAL) A system as recited in claim 15 wherein the web
11 server is further configured to swap an active data cache pointer with a staged data
12 cache pointer.

13
14 20. (ORIGINAL) A system as recited in claim 15 wherein each of the
15 plurality of web servers is configured to update data caches in the data server after
16 the scheduled activation time.

17
18 21. (ORIGINAL) A system as recited in claim 15 wherein each of the
19 plurality of web servers is configured to calculate a next scheduled activation time
20 after the scheduled activation time.

21
22 22. (ORIGINAL) A system as recited in claim 15 wherein the plurality
23 of web servers comprise a web farm.

1 23. (ORIGINAL) One or more computer-readable media having stored
2 thereon a computer program comprising the following steps:

3 retrieving a scheduled activation time from a data server;
4 prior to the scheduled activation time, retrieving updated data into a staging
5 cache in a server;

6 at the scheduled activation time, copying data from the staging cache in the
7 server to an active cache in the server; and

8 after the scheduled activation time, updating data caches in the data server
9 and calculating a next scheduled activation time.

10 24. (ORIGINAL) One or more computer-readable media as recited in
11 claim 23 further comprising:

12 comparing a time associated with a clock in each server to a time associated
13 with a clock in the data server; and

14 adjusting the scheduled activation time on each server by the time
15 difference between the clock in the server and the clock in the data server.

16 25. (ORIGINAL) One or more computer-readable media as recited in
17 claim 23 wherein each server contains a clock, and wherein the clocks in the
18 plurality of servers are not synchronized with one another.

1 26. (ORIGINAL) One or more computer-readable media as recited in
2 claim 23 wherein updating data caches in the data server and calculating the next
3 scheduled activation time are performed if another process has not yet updated the
4 data caches or calculated the next scheduled activation time during a current data
5 synchronization cycle.

6
7 27. (ORIGINAL) One or more computer-readable media as recited in
8 claim 23 further comprising:

9 if the server is initialized, then copying data from an active cache in the
10 data server to the active cache in the initialized server.

11
12 28. (ORIGINAL) One or more computer-readable media as recited in
13 claim 23 wherein the copying data comprises swapping an active data cache
14 pointer with a staged data cache pointer.

15
16 29. (CURRENTLY AMENDED) A method of synchronizing data
17 among a plurality of web servers, wherein each of the plurality of web servers is
18 coupled to a common data server, the method comprising:

19 providing a scheduled activation time from the data server to each of the
20 plurality of web servers;

21 communicating updated data into a staging cache in each of the plurality of
22 web servers prior to the scheduled activation time; and

23 copying data from the staging cache in each of the plurality of the web
24 servers to an active cache in each of the plurality of the web servers, respectively,
25 at the scheduled activation time.

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2 B/ 30. (ORIGINAL) A method as recited in claim 29 wherein the
3 communicating updated data into a staging cache is performed asynchronously.

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5 31. (ORIGINAL) A method as recited in claim 29 wherein the copying
6 data comprises swapping an active data cache pointer with a staged data cache
7 pointer.

8
9 32. (ORIGINAL) A method as recited in claim 29 wherein no
10 communication is required between the web servers to synchronize their data.

11
12 33. (ORIGINAL) One or more computer-readable memories containing
13 a computer program that is executable by a processor to perform the method
14 recited in claim 29.
